North Carolina A&T State University School of Agriculture and Environmental Sciences Newsletter

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Preparing. Finding. Implementing solutions.

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DR. MAC'S (EXPANDED) MINUTE

Six SAES academic programs among 60 cut from UNC system

Normally my column shares the front page of this newsletter with a top news story. Because of the seriousness of what's happening in the SAES, I'm using the entire front page of this edition to share with you the changes we are facing and how we are working hard to make sure we have the kind of school of agriculture that this state needs.

First, a little background.

In March, A&T's Program Discontinuation and Consolidation Committee announced that 10 of the University's academic programs were among 60 in the UNC system that the Board of Governors was discontinuing because the number of graduates produced by these programs was lagging behind enrollment goals set for all academic programs in the system.

Six of the SAES academic programs were designated for reassignment. Therefore, beginning with the fall 2011 semester, the SAES will no longer offer bachelor's degrees in



a school of agriculture that is making an even greater impact on the fabric of life in North Carolina. I'm confident that the SAES has a long, bright and distinguished future. While much work is taking place to reshape and refocus the SAES, I'm optimistic that we will emerge stronger and more vibrant.

Since the announcement of what programs we would discontinue was made, I've been meeting with students who will be affected to advise them of their new options. Students who are currently enrolled in the six programs will be affected differently; all graduate level students will be allowed to complete their degrees. Also, those who are juniors and seniors will be given up to three years to complete their degree requirements. Although some of the courses required for graduation will not be offered with previous frequency, those students seeking a bachelor's or master's degree in the six programs will be accommodated. Students who were sophomores or freshmen in one of these programs in the 2010-11 academic year, as well as incoming freshmen and transfer students planning to enroll in them, have been directed to consider

used at other schools of agriculture. We are talking with leading agricultural experts to assess their suggestions and we are talking with faculty, staff and students about what they want in the SAES.

I've also been in contact with educational leaders from across the state and nation. What we are doing here is in line with what's happening elsewhere. At the University of North Carolina at Greensboro, the administration has just merged the schools of Human and Environmental Sciences and Health & Human Performance. At the SAES, we are similarly working to save programs and making adjustments that I think will eventually result in a dramatic increase in enrollment.

As at other schools and colleges at A&T and at all 16 institutions in the UNC system, discontinuation of some low producing SAES academic programs is in some respects a response to the state's economic climate. I know that GA is working hard to ensure that we have a university system that is operating efficiently and effectively. I also know that as a result of these changes we will lose a few employees. While losing any employee is one too many, I assure you that our core courses will remain. They may have different names, but we will continue to do what we do best.

I also assure you that we will continue to have strong agricultural research and Cooperative Extension programs. At the heart of a land-grant university is a strong focus on academics, research and Cooperative Extension. This isn't going to change. Although change is coming, we will emerge stronger and we will remain on the move.

"I see this as an opportunity to develop a school of agriculture that is making an even greater impact on the fabric of life in North Carolina." — Dr. McDowell

agricultural economics, earth and environmental sciences or family and consumer science education; nor master's degrees in agricultural economics, animal health science, and plant, soil and environmental sciences. Current master's students and juniors and seniors already enrolled will be allowed to continue their progress toward degrees in these areas.

Instead of seeing these actions as a negative, I see this as an opportunity to develop

majoring in one of the closely related academic programs in the SAES. It is our hope, following our restructuring, to accommodate these students into a program similar but better than their original intent.

I've also been meeting with my administrative team to examine additional options for preparing the society-ready students that have been the SAES's trademark throughout its history. We are examining some structures

— Dr. Donald McDowell
Interim Dean, SAES

Worku named A&T's Senior Researcher of the Year



Dr. Mulumebet "Millie" Worku of the SAES has been named Senior Researcher of the Year by A&T's Division of Research & Economic Development. Worku's career as an SAES research scientist includes 29 grants for which she has served as principal investigator or co-PI that have brought more than \$7.5 million to A&T. She has also mentored students through award-winning research focused on genomics, bioinformatics and the molecular and genetic underpinnings of natural immunity to mammalian diseases.

DR. MULUMEBET "MILLIE" WORKU,

professor in the Department of Animal Sciences, is the recipient of the University's Senior Researcher of the Year Award for 2010-11, in recognition of her outstanding contributions to science and to A&T's research program.

To colleagues who have observed her dedication and commitment to both teaching and genomics research since her arrival at A&T in 1999, the award comes as no surprise.

Worku's award nominations from students and colleagues from A&T and across the state cite her "knowledge, enthusiasm, vision and energy," and particularly her ability to inspire students to pursue careers in the sciences, qualities which also garnered her the SAES Teacher of the Year Award in 2007.

A member of the award selection committee summed up her appraisal of Dr.

Worku with one word: "Awesome!" Her funded research projects have included "Biologically inspired adaptive and reconfigurable systems: Modeling, synthesis, and simulation"; "Genomic diversity and innate immune system response"; and "Harnessing the power of genomics to determine the effect of post-harvest technologies on N.C. heirloom tomatoes."

Worku's research program is focused on exploring the molecular and genetic basis for natural resistance or immunity to mammalian diseases — especially mastitis. The overarching goal is to improve diagnosis, treatment and selection of animals to enhance farmers' bottom lines.

During her tenure, she has been a principal investigator (PI) or co-PI on 29 successful grant proposals at the University, worth a total of more than \$7.5 million, and

continues to lead or collaborate on three or more research projects each year. Over the years, her efforts have resulted in the Department of Animal Sciences acquiring many genomics-related tools and instruments, including a bioinformatics learning lab, quantitative polymerase chain reaction (qPCR) and microarray instruments. Worku has gone on to develop a genomics course that incorporates these technologies.

"I believe that the experience and knowledge that I gained in her lab and under her mentorship have been extremely helpful in obtaining a challenging career in industry," says Antrison Morris, a graduate of the master's program in animal sciences, and now an associate scientist at Xenobiotic Laboratories in New Jersey.

Worku reports that some of her most rewarding discoveries include the discovery of the so-called "wingless gene" in goats and pigs — a gene that is important to development; her work in developing breeding goats to deliver higher amounts of prosaposin, a milk protein that could be helpful in managing Parkinson's, Alzheimer's and other neurodegenerative diseases; and her recent finding that heirloom tomato extracts can ease inflammation in animals and possibly humans as well.

"It is highly rewarding to be able to share in the excitement of discovery and learning with my students, colleagues and collaborators to impact food security and safety using the fruits of genomics progress," says Worku.

Worku previously served as a researcher with the U.S. Department of Agriculture and the Food and Drug Administration. She was an International Atomic Energy Agency research fellow at the University of Glasgow in Scotland.

She holds a Ph.D. and master's degree, both in animal sciences, from the University of Maryland, and a bachelor's from Alemaya University in Ethiopia, also in animal sciences.

McMillan named SAES Teacher of the Year

DR. VALERIE JARVIS
MCMILLAN, associate
professor of child development
and family studies in the
Department of Family and
Consumer Sciences, has been
named SAES Teacher of the
Year for 2010-11.

Students, colleagues and administrators alike
all attest to the exceptional quality of McMillan's teaching, advising and mentoring abilities, as well as her diligent work on behalf of advancing the profession of early childhood education. It was many of these same qualities that won her the school's Advisor of the Year

McMillan is described by students as a disciplined, but flexible professor.

Award in 2007.

"She has a characteristic ability to work with people and come up with new



McMillan

solutions based on teamwork and feedback," said Catrese Parks, one of her students.

In addition to maintaining a full teaching and advising workload, McMillan also remains active in research. Her recent projects have explored family and societal dynamics that are involved in childhood obesity. One of her studies

presents evidence that family decisions about food selection tend to be influenced more by children than by adults. Another study she is collaborating in suggests that children at age 4 are more receptive to education about healthy food choices, such as fruits and vegetables, than at other ages.

"I am grateful for the chance to have

learned from her," said Havalah Moore, McMillan's graduate research assistant.

McMillan joined the SAES faculty in 2000. During her tenure, she has been instrumental in coordinating the Child Development and Family Studies Program, which offers what has become one of the most popular and high performing majors in the SAES. She is also active in assisting Cooperative Extension in evaluating A&T's Parenting Matters curriculum, which teaches parenting skills to families across North Carolina. In addition, McMillan serves as the faculty liaison for the Child Development Laboratory, which is a five-star rated early childhood education program that serves families, students and A&T social sciences researchers as both a community and academic resource.

"Dr. McMillan's success and impact can be measured by the number of students whom she has taught and advised, who today are successful, practicing professionals," said Dr. Valerie L. Giddings, department chair.

Dean's collaboration award shared by two teams headed up by Extension specialists

EXPERTS with The Cooperative Extension Program at A&T and the SAES's International Trade Center are garnering acclaim for their ability to integrate within the community as well as with their colleagues, having received a pair of SAES Dean's Collaboration Awards.

With leadership from Dr. Osei Yeboah – the SAES's interim director of the L.C. Cooper Jr. International Trade Center – Extension's Ag and Natural Resources Team helped a Wake County farmer implement a \$200,000 grant from USDA's grants program for efforts to help socially disadvantaged farmers that is known as the "2501 program." The farmer, Charles Whitaker, and his Whitaker Small Farm Group Inc., used a chunk of the grant to train farmers in Sampson, Duplin and Pender counties in horticultural production.

Extension's agricultural and natural resources team worked with the group of 18 farmers, helping them with greenhouse and high-tunnel production. In addition to Yeboah, those honored by the SAES's interim dean, Dr. Donald McDowell, during the student-faculty awards banquet are: specialists Drs. Keith Baldwin, Michelle Eley and Niki Whitley, and associates Rickie

Holness, Courtney Owens and Grace Summers.

Another Collaboration Award honoree, Dr. Claudette Smith – program leader for Extension's Family and Consumer Sciences team – was cited for her leadership in generating the 4-H National Science Experiment that led to national and international acclaim for A&T. To develop the experiment, Smith reached across campus to involve Dr. Stephanie Luster-Teasley, from the College of Engineering, and Dr. Gregory Goins from the College of Arts and Sciences. The trio put forth a water-quality science experiment that beat out the competition from land-grant universities across the country that was conducted on campus, as well as across the country and around the world in the fall of 2010.

Smith also secured corporate sponsorship from IBM, which paid for all expenses – materials, supplies, T-shirts and lunch – and sent volunteers to work with approximately 270 students who were bused to campus to conduct the 4-H₂O experiment. Smith also worked with the N.C. Department of Public Instruction, Guilford County Schools and campus volunteers to conduct the on-campus event.

on the *move*

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